

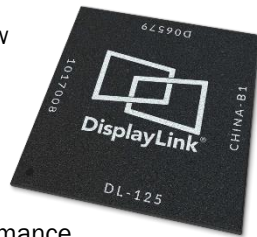
DisplayLink DL-1x5 Series

Product Brief

DisplayLink's virtual graphics technology is the industry-leading solution for easy display and docking station connectivity to notebooks, netbooks and desktop computers. The DL-1x5 series enables a range of USB 2.0-based display peripherals that remove the need for a discrete graphics card. Expand workspaces with USB-powered displays or connect VGA and DVI monitors over USB with a low-cost graphics adapter or docking station. Integrated FPI and TTL enable direct connection to LCD displays for embedded designs.

DisplayLink's intelligent image processing algorithms, coupled with the high performance (DDR1) memory interface and the DisplayLink DL2 adaptive compression scheme ensure a highly interactive, low latency user experience that is practically indistinguishable from a traditional monitor connection. This ensures smooth window and cursor movement and support for full-screen video playback.

The DL-1x5 series requires no additional hardware on the host device and minimal additional components to complete the PCB. With support for both standard-A and USB-C connectors, the DL-1x5 series provides a high-performance universal interface with a low BOM cost.



Applications and Benefits

- USB monitors, including mini-monitors and portable displays, with no external power source
- USB graphics adapters for external monitors with DVI or VGA ports to connect over USB
- Displays for embedded designs with TTL and FPI
- USB docking stations with DVI, VGA and USB outputs
- USB projectors for easy connection to a laptop or desktop



## DisplayLink Certified Plug and Display

DisplayLink Certified products are thoroughly tested in our labs to guarantee interoperability with the vast DisplayLink graphics ecosystem. Regular software updates ensure a lifetime of performance enhancements.



Look for the DisplayLink Certified Plug and Display mark.

Product Feature	DL-115	DL-125	DL-165	DL-195
Target products	Mini-monitors	Entry-level monitors and projectors	Entry-level docks, mainstream monitors and adapters	High-end monitors, docks and adapters
Maximum resolution	1024x600	1280x1024 1440x990 (wide)	1600x1200 1920x1080 (wide)	1920x1200 2048x1152 (wide)
DisplayLink DL2 compression	✓	✓	✓	✓
Integrated TMDS for DVI and VGA	✓	✓	✓	✓
Integrated TTL and FPI	✓	✓	✓	✓
Integrated USB 2.0	✓	✓	✓	✓
USB Standard-A and USB-C input	✓	✓	✓	✓
Dual core decoded engines	✓	✓	✓	✓
DDR and I <sup>2</sup> C EPROM required	✓	✓	✓	✓

### Packaging

- 19 mm x 19 mm
- 276-ball PBGA lead free. RoHS compliant
- 1 mm lead pitch

### Reference Designs

Synaptics supplies a full set of schematics and PCB layout information along with firmware and OS drivers to complete a bus-powered or mains-powered monitor design.

### Ease of Deployment

DisplayLink drivers are available for Windows (deployable via Windows Update), MacOS, Ubuntu, Android, and Chrome OS. The DL-1x5 series requires only a simple DL2 driver on the host computer, which is fully open-source and benefits from Linux kernel support.

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## Supported Platforms

- Windows<sup>®</sup> 10 /Windows 7
- MacOS
- Android
- Ubuntu
- Chrome OS

